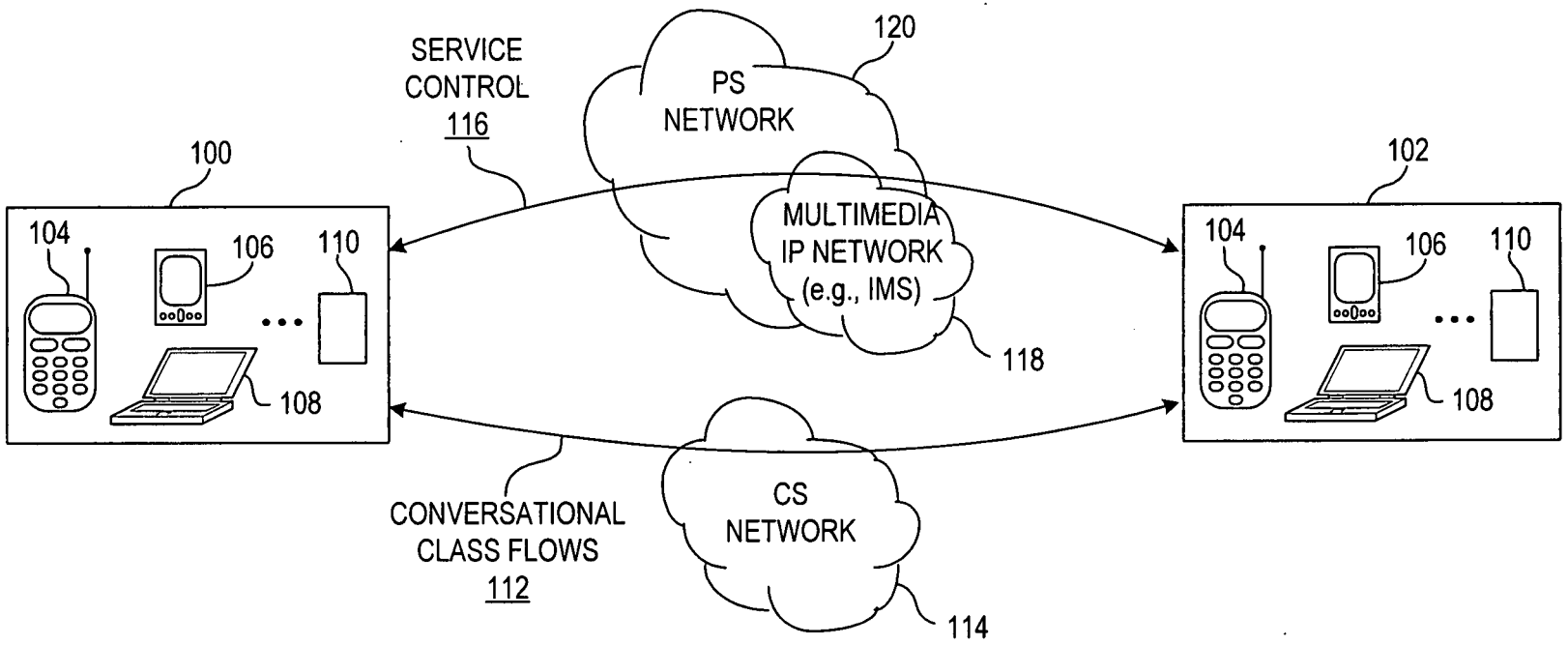
SERVICE
CONTROL
116
120
PS
NETWORK
100
102
MULTIMEDIA
IP NETWORK
(e.g., IMS)
118
104
106
110
108
104
106
110
108
CONVERSATIONAL
CLASS FLOWS
112
CS
NETWORK
114

FIG. 1

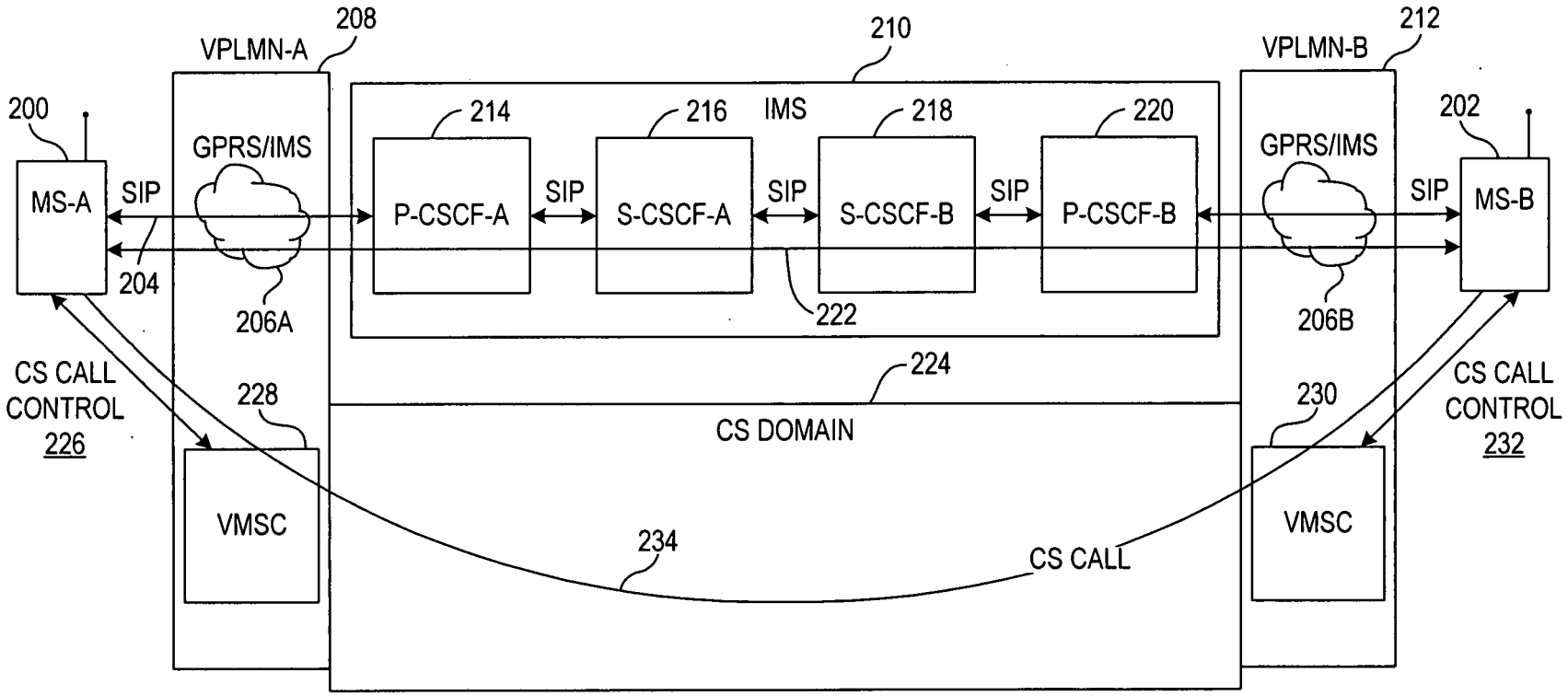
VPLMN-A
208
210
VPLMN-B
212
200
214
216
IMS
218
220
202
GPRS/IMS
GPRS/IMS
MS-A
SIP
P-CSCF-A
SIP
S-CSCF-A
SIP
S-CSCF-B
SIP
P-CSCF-B
SIP
MS-B
204
206A
222
206B
CS CALL
CONTROL
226
224
228
230
CS CALL
CONTROL
232
CS DOMAIN
VMSC
VMSC
234
CS CALL

FIG. 2

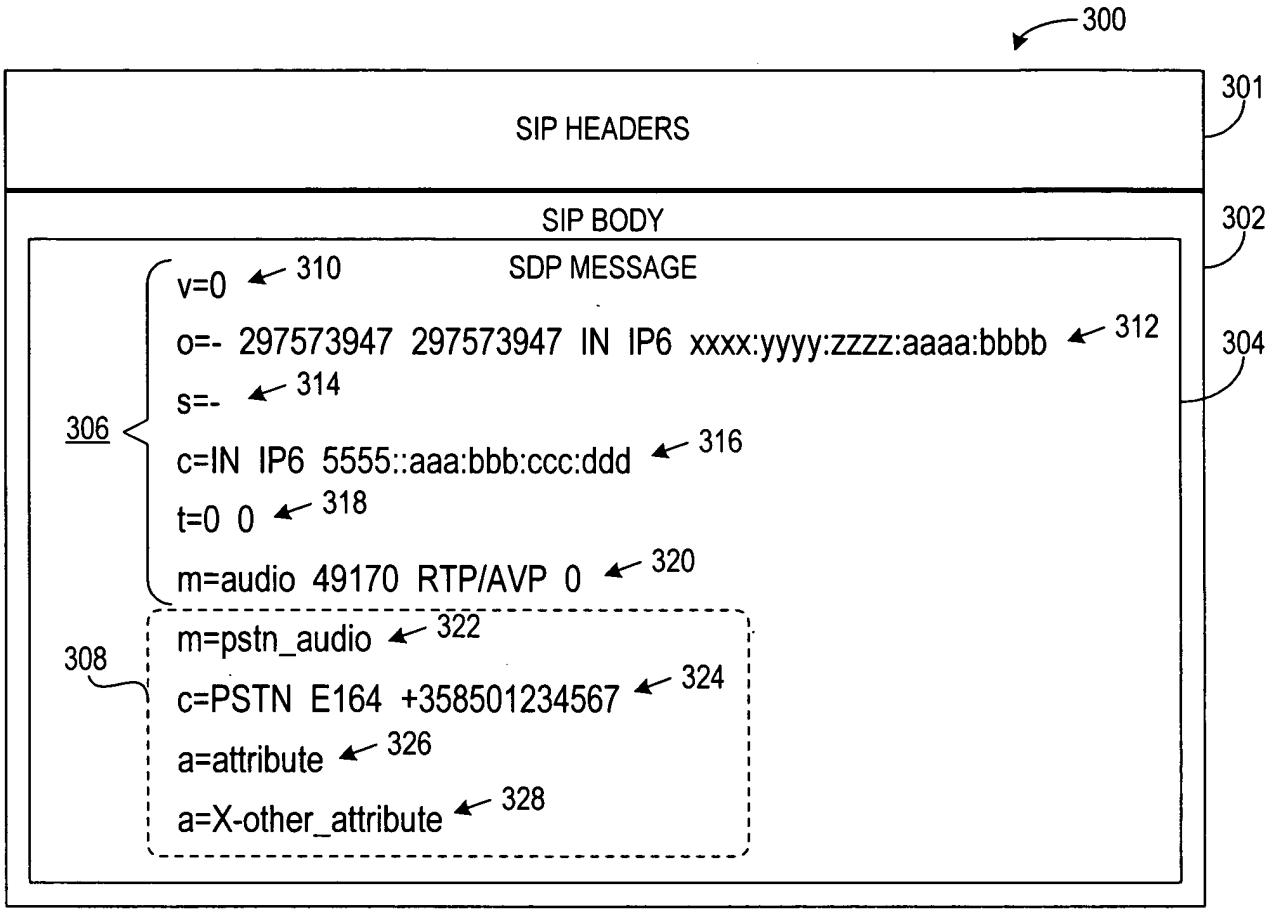
300
SIP HEADERS
301
SIP BODY
302
SDP MESSAGE
304
v=0
310
o=- 297573947 297573947 IN IP6 xxxx:yyyy:zzzz:aaaa:bbbb
312
s=-
314
306
c=IN IP6 5555::aaa:bbb:ccc:ddd
316
t=0 0
318
m=audio 49170 RTP/AVP 0
320
m=pstn_audio
322
308
c=PSTN E164 +358501234567
324
a=attribute
326
a=X-other_attribute
328

FIG. 3

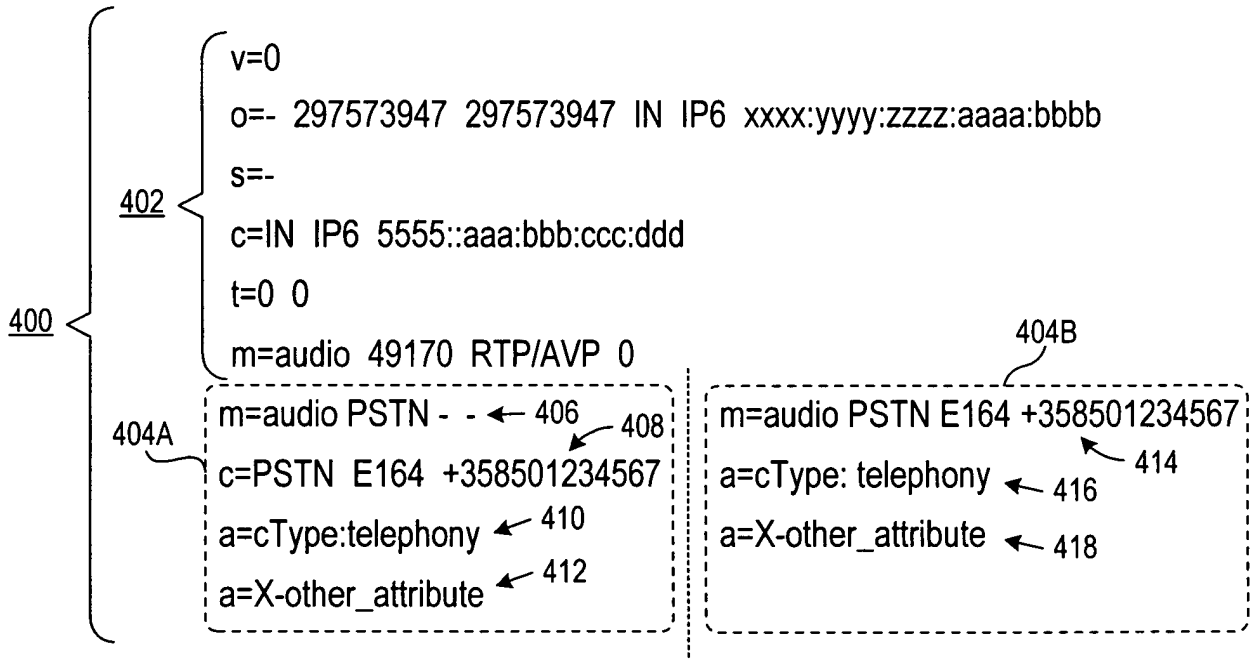
400
402
v=0
o=- 297573947 297573947 IN IP6 xxxx:yyyy:zzzz:aaaa:bbbb
s=-
c=IN IP6 5555::aaa:bbb:ccc:ddd
t=0 0
m=audio 49170 RTP/AVP 0
404A
m=audio PSTN - -
406
408
c=PSTN E164 +358501234567
a=cType:telephony
410
a=X-other_attribute
412
404B
m=audio PSTN E164 +358501234567
414
a=cType: telephony
416
a=X-other_attribute
418

FIG. 4

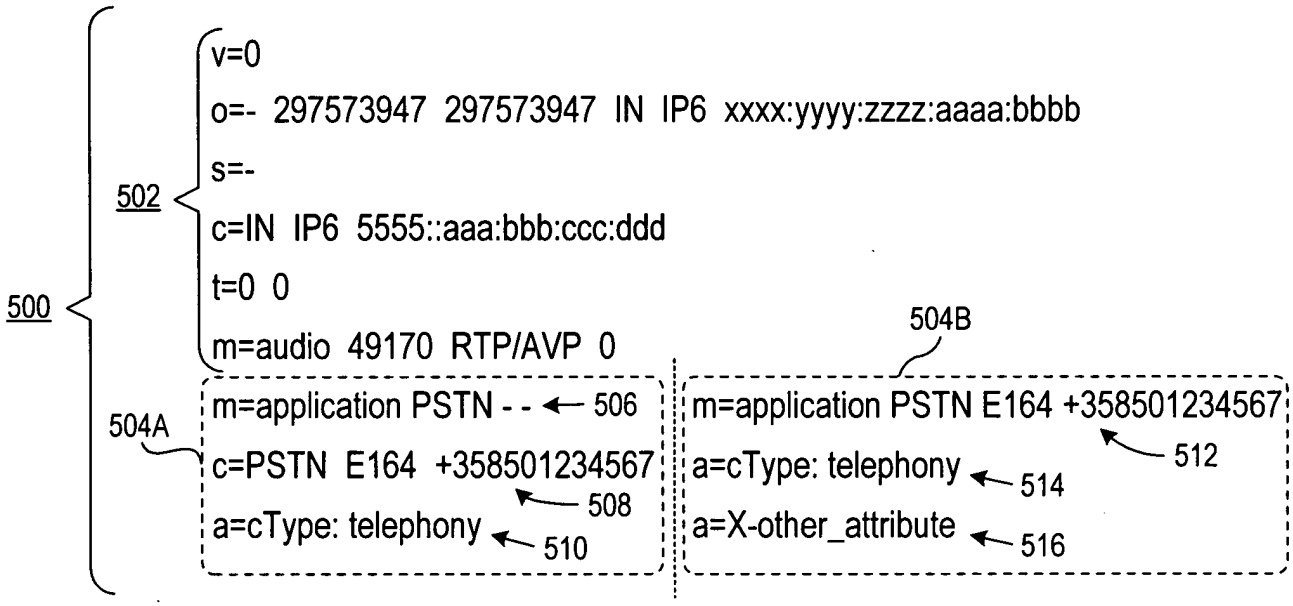

FIG. 5

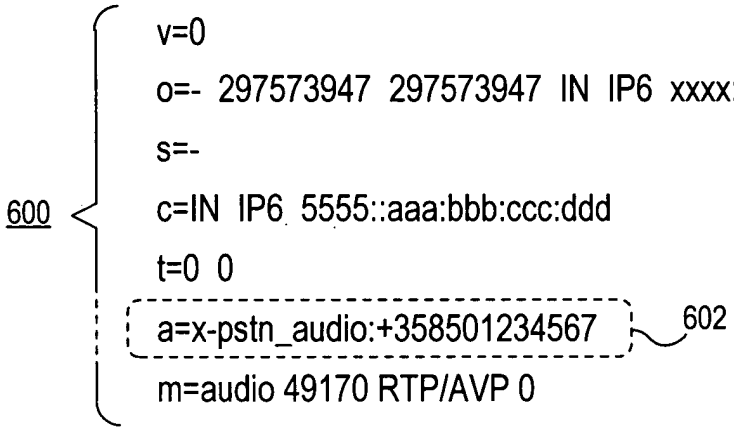

FIG. 6

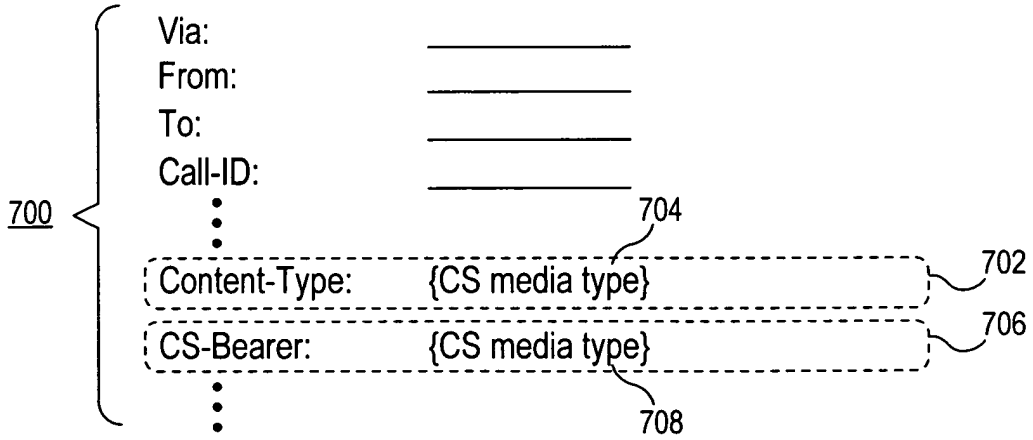

FIG. 7

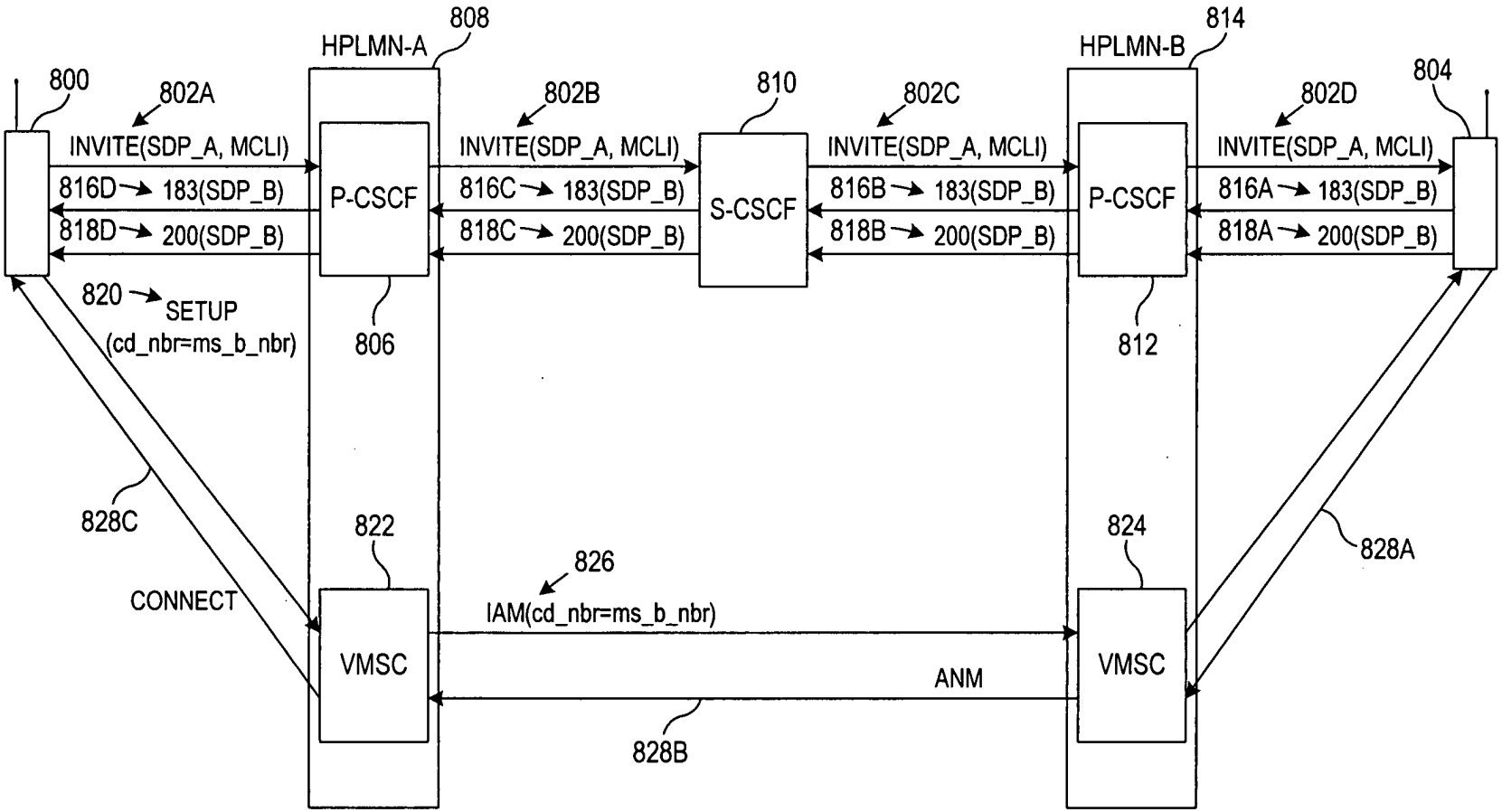
HPLMN-A
808
HPLMN-B
814
800
802A
802B
810
802C
802D
804
INVITE(SDP_A, MCLI)
INVITE(SDP_A, MCLI)
INVITE(SDP_A, MCLI)
INVITE(SDP_A, MCLI)
816D 183(SDP_B)
816C 183(SDP_B)
816B 183(SDP_B)
816A 183(SDP_B)
P-CSCF
S-CSCF
P-CSCF
818D 200(SDP_B)
818C 200(SDP_B)
818B 200(SDP_B)
818A 200(SDP_B)
820 SETUP
(cd_nbr=ms_b_nbr)
806
812
828C
822
824
826
828A
CONNECT
IAM(cd_nbr=ms_b_nbr)
VMSC
VMSC
ANM
828B

FIG. 8

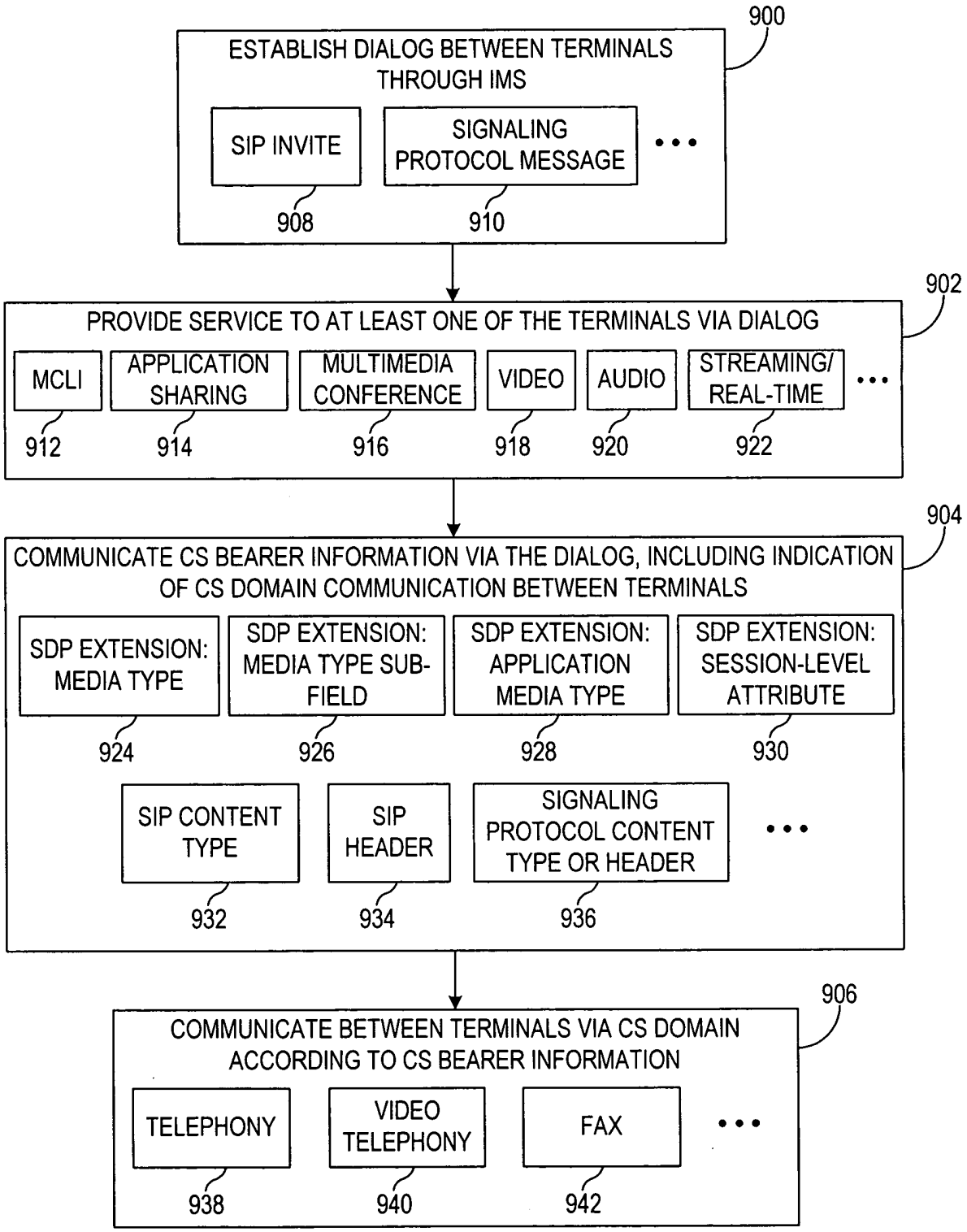
900
ESTABLISH DIALOG BETWEEN TERMINALS THROUGH IMS
SIP INVITE
SIGNALING PROTOCOL MESSAGE
908
910
902
PROVIDE SERVICE TO AT LEAST ONE OF THE TERMINALS VIA DIALOG
MCLI
APPLICATION SHARING
MULTIMEDIA CONFERENCE
VIDEO
AUDIO
STREAMING/ REAL-TIME
912
914
916
918
920
922
904
COMMUNICATE CS BEARER INFORMATION VIA THE DIALOG, INCLUDING INDICATION OF CS DOMAIN COMMUNICATION BETWEEN TERMINALS
SDP EXTENSION: MEDIA TYPE
SDP EXTENSION: MEDIA TYPE SUB-FIELD
SDP EXTENSION: APPLICATION MEDIA TYPE
SDP EXTENSION: SESSION-LEVEL ATTRIBUTE
924
926
928
930
SIP CONTENT TYPE
SIP HEADER
SIGNALING PROTOCOL CONTENT TYPE OR HEADER
932
934
936
906
COMMUNICATE BETWEEN TERMINALS VIA CS DOMAIN ACCORDING TO CS BEARER INFORMATION
TELEPHONY
VIDEO TELEPHONY
FAX
938
940
942

FIG. 9

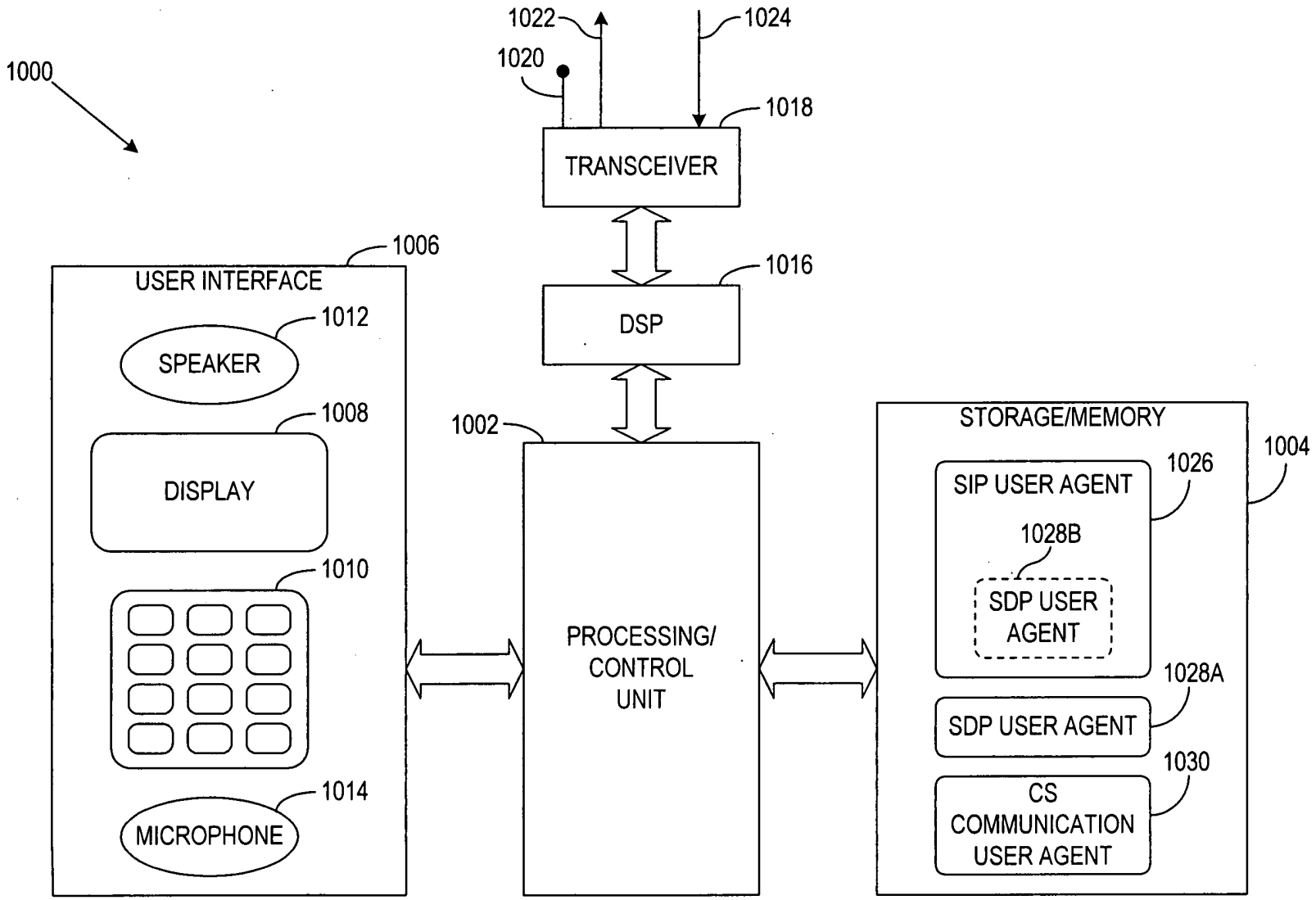
1000
1022
1024
1020
1018
TRANSCEIVER
1016
DSP
1006
USER INTERFACE
1012
SPEAKER
1008
DISPLAY
1010
1014
MICROPHONE
1002
PROCESSING/
CONTROL
UNIT
STORAGE/MEMORY
1004
1026
SIP USER AGENT
1028B
SDP USER
AGENT
1028A
SDP USER AGENT
1030
CS
COMMUNICATION
USER AGENT

FIG. 10